

DAILY BULLETIN

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NATIONS TO MEET IN GENEVA TO PLAN TSUNAMI DISASTER RECOVERY

Top U.S. relief official Natsios briefs on January
11 meeting

Fifteen days after an unprecedented disaster struck nations on the Indian Ocean, an equally unprecedented international effort is providing relief and assistance to millions of victims. An ever-increasing amount of aid is making its way to those who need it, according to a variety of reports.

Representatives from more than 80 governments will meet in Geneva January 11 to plan a long-term recovery effort for the 12 stricken nations.

Administrator Andrew Natsios of the U.S. Agency for International Development (USAID) will lead the U.S. delegation to the meeting, arriving there after a trip across the disaster zone last week. Help for the suffering nations will occur in three phases, according to the top U.S. international aid official: immediate relief, rehabilitation and long-term reconstruction. The Geneva meeting will focus on all three phases, Natsios said.

"This is just the beginning," Natsios said at a pre-conference press briefing in Washington. "We will play a major role in this."

He does not anticipate that additional aid pledges will be made at this one-day meeting. The amount promised by governments and organizations in the two weeks since the disaster now exceeds \$4 billion -- far

in excess of the \$1 billion appeal the United Nations made for immediate needs.

Natsios believes the emphasis should be placed on planning. "We need to focus our efforts on coordination, on the logistical systems and rapidly moving into rehabilitation and reconstruction phases, working with the governments of the countries," he said.

The tsunami disaster is unlike many humanitarian disasters that have occurred in post-conflict or nonfunctioning states. All the affected nations are democratic, functioning nations, Natsios said, some of which have significant emergency response agencies of their own. For that reason, he said, all the governments and agencies coming to provide assistance must allow local officials to take the lead.

"Our job is to support them. We need to make sure we are sensitive to the fact that these are sovereign governments," Natsios said. "We're not going in there to take anything over, we're simply helping them."

The USAID administrator sees several priorities for reconstruction. One he cited is the need to treat the psychological wounds of traumatized people who may have lost loved ones, friends, neighborhoods, possessions and livelihoods.

"Most of them will never finish dealing with these memories their entire lives," Natsios said. "We need to understand that's it's not just [the damage] you see, but what is behind the tragedy in people's minds and memories as well."

USAID and other organizations are working with national ministries of health to start psychological counseling programs, with particular attention to the needs of children.

Revitalizing business through so-called "micro-lending" programs is another priority cited by Natsios - but he added that institutions that USAID helped establish in the past in the affected countries were seriously damaged in the tsunami, with many employees killed.

Natsios said the rehabilitation effort must also address the need to get people back to work, help restore infrastructure - and provide people with income and a sense of purpose, making a helpful step toward recovery. U.S. Secretary of State Colin Powell announced a \$10 million

jobs program for affected regions while in Sri Lanka January 7.

Providing people with better shelter is another job that must be undertaken soon, Natsios said, so that temporary shelters set up in schools can be demobilized, allowing schools to return to the normalcy of education.

U.S. AID TO TSUNAMI VICTIMS WILL BE LONG-TERM, BUSH SAYS

President thanks American aid workers

President Bush says the U.S. government and nongovernmental organizations (NGOs) will remain committed to helping tsunami victims for the long term.

"The United States government and the NGOs that have worked so hard for so long in the region are committed to this area of the world for a long time," he said in January 10 remarks to employees of the U.S. Agency for International Development (USAID) and NGO leaders. "This is one of these projects that's not going to happen overnight. The intense scrutiny may dissipate, and probably will, but our focus has got to stay on this part of the world."

Bush thanked U.S. aid workers for their efforts and noted that they have been heavily involved in relief efforts since the beginning -- sending disaster assessment teams to affected countries; coordinating airlifts of relief supplies such as food, temporary shelter and hygiene kits; and arranging for clean water, medical aid and psychological help for survivors.

Bush said that aid workers are now beginning to focus on "rehabilitation and rebuilding." According to Bush, USAID is arranging small loans "for those whose livelihoods have been destroyed." He said that NGOs are also contributing to the effort "to help rebuild lives and help people get back on their feet," citing one group's donation of a fishing boat.

Bush also thanked the U.S. military for its contribution to relief efforts through the provision of food, medical supplies, water and transportation.

The president appealed to Americans to make monetary donations to the tsunami relief effort, but also called for continued contributions to NGOs in general to enable their work in other parts of the world to continue.

“It is essential that your contribution [to tsunami relief efforts] not replace the ongoing contributions you’re making to help the NGOs of America,” he said. “You should view the tsunami relief effort as extra help, to help solve the problem, so that we don’t short-change the compassionate needs -- the needs for compassion elsewhere in our country and the world.”

CHRONOLOGY OF U.S. ENGAGEMENT IN SUDAN PEACE PROCESS RECAPPED

State Department summarizes Bush
Administration’s peace efforts

Following is a State Department fact sheet on U.S. engagement in the Sudan peace process from March 2001 to December 2004:

Office of the Spokesman
Nairobi, Kenya
January 8, 2005

Chronology of U.S. Engagement in the Sudan Peace Process

March 2001: President Bush directs a review of U.S.-Sudan policy. The review results in three policy objectives: counterterrorism cooperation, an end to regional destabilization, and the achievement of a just peace.

May 2001: Secretary Powell directs Assistant Secretary Walter Kansteiner to quietly approach the Sudanese to discuss all three policy objectives, particularly the prospects for achieving a just peace in Sudan. President Bush appoints Andrew Natsios as U.S. Special Humanitarian coordinator for Sudan.

June 2001: The U.S. forms an informal Troika with the United Kingdom and Norway to support the peace process.

July 2001: U.S. Special Humanitarian Coordinator

Natsios travels to Sudan to lay out a framework of humanitarian access, reinstitution of humanitarian neutrality, and preparing southern Sudan for peace.

September 2001: President Bush appoints former Senator John Danforth as the Special Envoy for Peace in Sudan.

November 2001: Special Envoy Danforth travels to the region and sets out “four tests” for peace: a slavery commission, ending attacks on civilians, days of tranquility (vaccination program), and a Nuba Mountains ceasefire.

January 2002: Secretary Powell directs a U.S. team to assist parties with the Nuba Mountains ceasefire discussions. The parties agree to Ceasefire Agreement in the Nuba Mountains, Burgenstock, Switzerland.

Spring 2002: Assistant Secretary Kansteiner forms the Sudan Programs Group within the Department’s Bureau of African Affairs to support Special Envoy Danforth and the peace talks. The U.S. and the Troika stand up a Joint Monitoring Commission to monitor the Nuba Mountains ceasefire. Secretary Powell authorizes the U.S. Embassy in Khartoum to resume normal operations after a four-year hiatus.

May 2002: The U.S.-funded report of the International Eminent Persons Group on slavery in Sudan is issued. The U.S. participates directly in the Sudan peace talks for the first time.

July 2002: The parties sign the Machakos Protocol.

October 2002: The parties agree to a cessation of hostilities. The U.S.-led Civilian Protection Monitoring Team begins operations to monitor attacks on civilians. President Bush signs the Sudan Peace Act.

January 2003: Special Envoy Danforth travels to the region to monitor progress on the “four tests.”

May 2003: Secretary Powell meets with Sudan People’s Liberation Movement (SPLM) Chairman Garang in Washington.

September 2003: The parties sign an agreement on security arrangements. Secretary Powell meets with Sudanese Foreign Minister Ismail in Washington.

October 2003: Secretary Powell travels to Naivasha, Kenya-the site of the peace talks.

November 2003: Secretary Powell meets with SPLM Chairman Garang in Washington. U.S.-sponsored UN Security Council President Statement is issued, authorizing pre-planning for a UN Peacekeeping mission.

December 2003: President Bush calls President Bashir and SPLM Chairman Garang. Secretary Powell places key call to parties on wealth-sharing, which results in a breakthrough agreement.

January 2004: Parties sign the agreement on wealth-sharing.

March 2004: The U.S. tables a compromise proposal to resolve the Abyei issue, which is accepted by the parties. President Bush calls President Bashir and SPLM Chairman Garang.

April 2004: The U.S. presses for the first UN Security Council press statement on Darfur.

May 2004: The parties sign agreements on power-sharing and the three conflict areas (Nuba Mountains/Southern Kordofan, Blue Nile, and Abyei). The UN Security Council adopts a Presidential Statement condemning the violence in Darfur and demanding humanitarian access.

June 2004: Secretary Powell travels to Khartoum and Darfur, Sudan. President Bush nominates Special Envoy Danforth as the U.S. Ambassador to the United Nations. The U.S. and U.K. introduce UN Security Council Resolution 1547, establishing a UN Special Representative of the Secretary General and creating a UN political office in Sudan.

July 2004: The U.S. sponsors UN Security Council Resolution 1556 on Darfur.

September 2004: Secretary Powell meets with SPLM Chairman Garang in Washington. The U.S. sponsors UN Security Council Resolution 1564 on Darfur.

November 2004: Secretary Powell dispatches a U.S. team to discuss security arrangements with the Sudan People's Liberation Army Front Commanders. Under the U.S. Presidency, the United Nations Security Council holds an extraordinary session in Nairobi, Kenya, to discuss Sudan. The parties sign a Declaration, witnessed by the Security Council, to finish the final comprehensive agreement by the end of 2004. The Security Council

adopts Resolution 1574. Secretary Powell meets with National Democratic Alliance (NDA) Chairman Mirghani. President Bush calls President Bashir and SPLM Chairman Garang.

December 2004: The parties complete the permanent ceasefire and implementation modalities. President Bush signs the Comprehensive Peace in Sudan Act.

UNITED STATES, GENERAL MOTORS TO BOOST HYDROGEN STORAGE

New tank would store more hydrogen on fuel-cell vehicles

General Motors Corporation (GM) and the Department of Energy's (DOE) Sandia National Laboratories have launched a partnership to design and test an advanced method for storing hydrogen based on metal hydrides, a step toward making fuel-cell vehicles competitive in driving range with gasoline-powered automobiles.

According to a January 7 DOE press release, metal hydrides -- formed when metal alloys are combined with hydrogen -- can absorb and store hydrogen in their structures. When subjected to heat, the hydrides release the hydrogen.

In a fuel-cell system, the hydrogen can then be combined with oxygen to produce electricity.

GM and Sandia have launched a four-year, \$10 million program to develop and test tanks that store hydrogen in a complex hydride called sodium aluminum hydride, also known as sodium alanate.

The goal is to develop a solid-state hydrogen storage tank that would store more hydrogen on a fuel-cell vehicle than current conventional hydrogen storage methods can. Researchers also hope to create a tank design that could be adaptable to any type of solid-state hydrogen storage.

GM and Sandia say the program is part of a concerted effort to find a way to store enough hydrogen aboard a fuel-cell vehicle to equal the driving range obtained from

a tank of gas, which will be key to customer acceptance of fuel-cell vehicles.

Current leading methods of storage are liquid and compressed gas, but neither technology has been able to provide the needed range and running time for fuel-cell vehicles.

Text of the DOE press release follows:

DOE/Sandia National Laboratories

January 7, 2005

GM joins with Sandia to advance hydrogen storage

Partnership focuses on solid-state storage

DETROIT, Mich., and LIVERMORE, Calif. -- General Motors Corp. and Sandia National Laboratories have launched a partnership to design and test an advanced method for storing hydrogen based on metal hydrides.

Metal hydrides -- formed when metal alloys are combined with hydrogen -- can absorb and store hydrogen within their structures. When subjected to heat, the hydrides release their hydrogen. In a fuel cell system, the hydrogen can then be combined with oxygen to produce electricity.

GM and Sandia, a National Nuclear Security Administration lab, have embarked on a 4-year, \$10 million program to develop and test tanks that store hydrogen in a complex hydride, sodium aluminum hydride -- or sodium alanate for short. The goal is to develop a pre-prototype solid-state hydrogen storage tank that would store more hydrogen onboard a fuel cell vehicle than current conventional hydrogen storage methods. Researchers also hope to create a tank design that could be adaptable to any type of solid-state hydrogen storage.

"Hydrides have shown significant early promise to one day increase the range of fuel cell vehicles," says Jim Spearot, director, GM Advanced Hydrogen Storage Program. "We know a lot of research still needs to be done, both on the types of hydrides we use, as well as the tanks we store them in. We think our work on projects like this with Sandia will get us another step closer to our goal."

GM and Sandia say the program is part of a concerted effort to find a way to store enough hydrogen onboard a fuel cell vehicle to equal the driving range obtained from a tank of gas, which will be key to customer acceptance of fuel cell vehicles.

The current leading methods of storage are liquid and compressed gas. However, to date, neither of these technologies has been able to provide the needed range and running time for fuel cell vehicles.

"We are designing a hydrogen storage system with challenging thermal management requirements and limits on volume and weight," says Chris Moen, manager of science and engineering technologies at Sandia. "Our staff researchers are excited to apply their unique, science-based design and analysis capabilities to engineer a viable solution."

"This is the kind of public private research partnership that will help us realize the President's vision, communicated in his 2003 State of the Union Address, that 'the first car driven by a child born today can be powered by hydrogen, and pollution-free,'" said DOE Secretary Spencer Abraham. "Over the long term, because of the President's visionary leadership, clean, efficient hydrogen fuel technologies like this will help make our nation far less reliant on foreign sources of energy."

In 2003, President Bush announced the Hydrogen Fuel Initiative with \$1.2 billion over five years (FY 2004-FY 2008) to accelerate hydrogen research. Sandia's research activities in hydrogen storage support the President's long term vision for commercially viable hydrogen-powered vehicles to reverse America's growing dependence on foreign oil.

The GM-Sandia project, privately funded and separate from the President's initiative, will be conducted in two phases. In Phase One, the program will study engineering designs for a sodium alanate storage tank. Researchers will analyze these designs using thermal and mechanical modeling, develop controls systems for hydrogen transfer and storage, and develop designs for external heat management. GM and Sandia scientists will also be testing various shapes -- from cylindrical to semi-conformable -- to see which are the most promising.

In Phase Two, researchers will subject promising tank designs to rigorous safety testing and ultimately fabricate pre-prototype sodium alanate hydrogen storage tanks based on knowledge gained from the program's first phase.

A possible scenario for filling up with a solid-state storage solution such as sodium alanate could look like this: The alanate would come preloaded in the tank, where it would remain, giving up its hydrogen, and becoming a

mixture of sodium hydride and aluminum. The customer would fill up using gaseous hydrogen.

During filling, the mixture of aluminum and sodium hydride would absorb the hydrogen and turn it back into alanate, which would be ready to yield hydrogen when needed by the fuel cell. Once the tank is filled, the hydrogen would be stored at low pressure.

While it has shown good potential, hydride-based hydrogen storage also has some hurdles to clear. One current drawback is that most complex metal hydrides, such as sodium alanate, still operate at too high a temperature, which causes an inefficiency that forces some of the hydrogen to be used up in order to release the remaining hydrogen. Another challenge is reducing the time it takes to reabsorb hydrogen. It currently takes at least 30 minutes to recharge.

In separate, independent projects outside of this collaboration, both GM and Sandia are working to identify alloys that will store greater amounts of hydrogen that can be released at lower temperatures. Reducing filling and recharging times is another key area of research.

The research conducted through the GM-Sandia partnership is independent from that of Sandia's participation in the Metal Hydride Center of Excellence. The Center of Excellence, to be funded in Fiscal Year 2005 through a U.S. Department of Energy "Grand Challenge," aims to develop a new class of materials capable of storing hydrogen safely and economically.

General Motors Corp. (NYSE: GM), the world's largest vehicle manufacturer, employs about 325,000 people globally. Founded in 1908, GM has been the global automotive sales leader since 1931. GM today has manufacturing operations in 32 countries and its vehicles are sold in 192 countries. In 2003, GM sold nearly 8.6 million cars and trucks, about 15 percent of the global vehicle market. GM's global headquarters are at the GM Renaissance Center in Detroit. More information on GM and its products can be found on the company's corporate website at www.gm.com.

Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin company, for the U.S. Department of Energy's National Nuclear Security Administration. With main facilities in Albuquerque, N.M., and Livermore, Calif., Sandia has major R&D responsibilities in national security, energy and environmental technologies, and economic competitiveness.